

Integral bounds for simple partial fractions

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Abstract

For $p \geq 2$ we obtain bounds for L^p -norms of the Fourier transform of real parts of simple partial fractions. For even p our estimate is sharp. We also prove a new inequality for L^p -norms of simple partial fractions which in some cases is stronger than the corresponding inequality obtained by V. Yu. Protasov. © Allerton Press, Inc., 2012.

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Keywords

Dirichlet series, Fourier transform, Hausdorff-young inequality, Simple partial fractions